

NOTICE OF PUBLIC MEETING & AGENDA

TRAFFIC SAFETY COMMISSION MONDAY, FEBRUARY 10, 2014 PUBLIC SAETY BUILDING, 401 E THIRD STREET, NEWBERG

"Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community."

- I. CALL MEETING TO ORDER
- II. ADMINISTER OATH OF OFFICE
- III. ROLL CALL
- IV. PLEDGE OF ALLEGIANCE
- V. PUBLIC COMMENTS
- VI. CONSENT CALENDAR
 - A. Review and approve minutes of January 13, 2014

VII. PUBLIC HEARINGS

- A. Appeal of Limited Decision to limit parking on Tukwila Street
- B. Consider installing stop signs at the Natalie Drive/Morris Street intersection, and potential improvements to the Terrace Drive/College Street intersection, including potential right-of-way expansion.

VIII. NEW BUSINESS

IX. STAFF REPORTS – GENERAL INFORMATION

- A. Police Update.
- B. Engineering Update
- X. ADJOURNMENT Next meeting March 10, 2014

ACCOMMODATION OF PHYSICAL IMPAIRMENTS: In order to accommodate persons with physical impairments, please notify the City Recorder's office of any special physical or language accommodations you may need as far in advance of the meeting as possible and no later than two business days prior to the meeting. To request these arrangements, please contact the City Recorder at (503) 537-1283. For TTY services please dial 711.

Posted: Feb 3, 2014



MEMORANDUM

ENGINEERING DEPARTMENT

P.O. Box 970 • 414 E. First Street • Newberg, Oregon 97132 Tel 503.537.1240 • Fax 503.537.1277

January 31, 2014

To: Newberg Traffic Safety Commission

Cc: Jay Harris, PE, City Engineer; Brian Casey, PD Chief; Mary Newell, PD Support Services

Manager

From: Jason Wuertz, PE, Civil Engineer

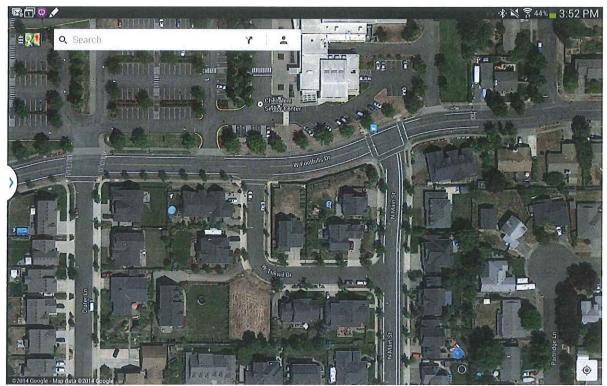
RE: TSC-14-001 \ Tukwila No Parking Request

The Traffic Safety Commission on November 12th, 2013, made a limited decision to install no parking signs on sections of Tukwila, which is directly south of Chehalem Valley Middle School and Crater Elementary School. According to a local resident, parents frequently use Tukwila as a drop-off/pick up point for students attending CVMS and Crater Elementary. The request stems from a resident's concern for child safety, as children travel north across Foothills Drive to get to school or crossing south to meet parents waiting on Tukwila. The engineering department has evaluated the decision made by the Traffic Safety Commission and has looked into the apparent safety concern.

All intersections, regardless if it has crosswalk markings, are leagal pedestrian crossings. Pedestrians who choose to cross at the intersection of Foothills Drive and Tuckwila Drive are doing so legally.

Parking is currently not allowed within certain distances from the intersection per the Oregon Vehicle Code. The Oregon Vehicle Code, which the City refers to, states that no parking is allowed within 50 feet upon the approach to an official stop sign if the standing or parking of a vehicle will obstruct the view of any traffic control device located at the side of the roadway. It also states that there shall be no parking within 20 feet of a crosswalk at an intersection. (Refer to section 811.550 (17,18)) The intersection as designed, with the compliance of this code, has sufficient sight distance for all turning movements.

The main safety concern as identified by a local resident is that parents are using Tukwila to drop off and pick up kids. The concern is that they are walking across Foothills Drive at an unsafe location, where there is no crosswalk. It is a legal intersection, and as such, pedestrians are allowed to cross with or without markings at their own risk. On street parking is a city standard along local residental streets. It is required to be part of new development and it is in place in the majority of existing local streets. It is a feature that is to be utilized by the public. To address the safety concern, the engineering department staff recommends that the Traffic Safety Commission reconsider the decision to install no parking signs along Tukwila, and instead approach the potential safety issue from an educational standpoint by working with the School District to educate parents.

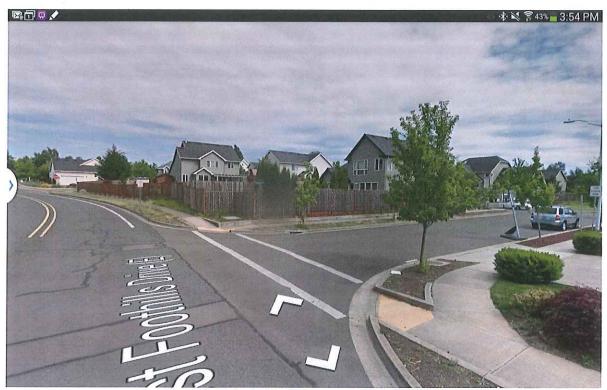


Aerial image of Tukwila & Foothills Intersection



Tukwila Drive looking North to Foothills Drive

"Working Together for a Better Community – Serious About Service" "Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community."



Foothills Drive looking East towards Tukwila Drive



Traffic Safety Commission
Brian Casey, Chief of Police – 503-538-8321
Jason Wuertz, P.E., Associate Engineer – 503-554-1631

NOTICE OF PUBLIC HEARING 7:00 PM, February 10, 2014 Public Safety Building 401 E Third Street, Newberg

The Newberg Traffic Safety Commission will hold a public hearing on February 10, 2014 at 7 pm at the Newberg Public Safety Building (401 E Third Street) to consider an appeal of a Limited Decision to limit parking on Tukwila.

At their meeting on November 12, 2013, the Traffic Safety Commission made a Limited Decision to place "No Parking signs on Tukwila Street, in front of Lot 114 and at the junction of Lots 127-224 on the west side of Tukwila, and in front of Lot 115 on the east side of Tukwila, restricting parking between the hours of 7:30 AM to 9:30 AM, and 2 PM to 3:30 PM on school days. This decision was appealed within the 14-day appeal period.

You are invited to participate in the hearing scheduled before the Traffic Safety Commission. If you wish to participate in the hearing, you may do so in person or be represented by someone else. You also may submit written comments. Oral testimony is typically limited to five minutes per speaker.

If you mail your comments to the City, please put the following information on the outside of the envelope:

Newberg Traffic Safety Commission – 2/10/14 Attn: Mary Newell PO Box 970 Newberg, OR 97132

Or you can email comments to: <u>TrafficSafety@newbergoregon.gov</u>.

The Traffic Safety Commission may reach a decision on this matter at this meeting or may be continued to another date. Should a decision be made at this meeting, the matter may be appealed to the Newberg City Council within 14-day days of the hearing.

Please call (503) 537-1221 if you have questions or require additional information.

Mary Newell Newberg Traffic Safety Commission

Date mailed: January 28, 2014

November 27, 2013

Newberg Traffic Safety Commission PO Box 970 401 E. Third Street Newberg, OR 97132

To Whom It May Concern:

Lam contacting you in response to a letter I received on 11/19/2013 regarding the decision to place "No parking" signs on Tukwila Street. I live on Tukwila Drive (at 115 Tukwila Dr.) and I, 100% disagree with this decision for several reasons and therefore would like to appeal it.

First, I am unaware of any reason why this action would be necessary and no support reasons were given in the letter. I have lived on this street for 13 years and there has never been a need for "no parking" on our street to date. Because of the proposed no parking hours and days, I wondered if this was a school safety issue, so I contacted the school. According to Antonia Crater Elementary, there are no safety concerns that would require this action and, in fact, both my children walked back and forth to Crater Elementary for many years without incident. The school stated they could think of no reason why this would be necessary.

If this decision is put into effect, you will essentially be making 1 neighbor happy at the espense of 5 other neighbors, because any person/s wanting to park on the restricted portion of Tukwila, will simply end up parking at the other end of Tukwila (in front of my house or my neighbors houses further down). This would most definitely not make me very happy. The "no parking" restrictions on one side of Tukwila just essentially move the problem to the other end of Tukwila.... Solving nothing!!

I suspect that this request was prompted by one of my neighbors, who are annoyed and frustrated with another neighbor who has a business out of her home. If this is the case, I am shocked and frustrated that the City of Newberg would get involved in a neighborhood squabble. I too have had my frustrations with this particular neighbor, but making a permanent change on our street is not the way to handle it and not the solution. I am equally baffled that the City of Newberg could make a decision like this without input from other neighbors.

I really hope this decision is repealed, as there is no basis or reasoning for it, and I really feel it is unwise for the City of Newberg to get in the middle of neighbor issues.

Thank you,

Dana Klingler
Dana & Todd Klingler

Mary Newell

From: Troy Fisher [fishert@newberg.k12.or.us]

Sent: Monday, December 02, 2013 8:47 AM

To: Mary Newell

Cc: Jon Franco; Kim Peck; Grace Bolliger

Subject: Traffic Mary Newell,

Thank you for informing me about the concern on Tukwilla. This morning I watched carefully at that intersection. I was out there from 8 to 8:30. Two sets of kids with parents that walked from the neighborhood, crossed at the corner of Tukwilla and Foothills. One car turned on Tuckwilla at 8:27 and stopped, then walked their student across at that point. Zero students crossed at that location (a corner) without parents with them. I visited with the families that did (three total families) and asked them to use the crosswalk at main where there is a crossing guard. I am not objecting to any decision that the traffic commission makes just wanted to give you a bit of data... one day at least. I also watched on and off from 7:00 - 7:30 (CV's drop off time) and saw no one then either. Please do forward this email to whomever may be interested. Thank you again for drawing this to my attention. I will continue to keep a close eye on the situation.

Troy Fisher, Principal Antonia Crater Elementary Newberg School District

Mary Newell

From: Troy Fisher [fishert@newberg.k12.or.us]

Sent: Wednesday, November 27, 2013 7:11 AM

To: Mary Newell

Subject: Re: Traffic Safety Decision in your area

Mary,

Thank you for your notice. I will have my crossing guard that is currently placed at the intersection of Chehalem and Main be watchful for students. I am confused as to when they would be crossing out of a crosswalk and where that would be. I will drive that area to look. As far as parking goes we have many empty spots in the parking lot both before and after school. The trick is getting the parents to use them. I am afraid every one is in such a hurry now days that the time it takes may be to much. Thank you for your sharing your concerns. I will be sure to investigate them.

Troy

On Tue, Nov 26, 2013 at 12:07 PM, Mary Newell < <u>mary.newell@newbergoregon.gov</u>> wrote:

Dear Principals Troy Fisher and Jon Franco,

The Traffic Safety Commission at their last meeting on November 12th, 2013, made a limited decision to install no parking signs on sections of Tukwila, which is directly south of Chehalem Valley Middle School and Crater Elementary School. A copy of this notice was sent to the school district as a 14-day appeal period is in process.

Apparently, parents frequently use Tukwila as a drop-off/pick up point for students attending CVMS and Crater Elementary. The request stems from a resident's concern for child safety, as children travel north across Foothills Drive to get to school or crossing south to meet parents waiting on Tukwila. As principals of the adjacent schools, we felt you would be concerned with children crossing out of the crosswalks as well as the possible lack of parking availability for parents.

I am attaching the notice of Limited Traffic Safety decision which was sent to all home owners within 300 feet of Tukwila. If you have any questions or suggestions which might help alleviate this parking and safety issue, please feel free to contact Neal Klein, Chairman of the Traffic Safety Commission; the City of Newberg City Engineer Jason Wuertz; or myself. You can also listen to a recording of the meeting by going to the City of Newberg website www.newbergoregon.gov. Access the Agendas/Meetings section and look for Archived Minutes.

Thank you for your time and consideration.

Mary E. Newell

Support Services Manager
Newberg-Dundee Police Department/9-1-1
401 E Third Street
Newberg, OR 97132
(503) 537-1221
(971) 246-0391 cell

Jason Wuertz City Engineer 503.554.1631

Brian Casey Chief of Police 503.538.8321



414 East First Street PO Box 970 Newberg, OR 97132

November 18, 2013

Dear Property Owner:

RE: Limited Traffic Decision (File #TSC-Tukwila)

The Traffic Safety Commission (TSC) at their meeting on Tuesday, November 12, 2013, made a Limited Decision to place "No Parking signs on Tukwila Street, in front of Lot 114 and at the junction of Lots 127-224 on the west side of Tukwila, and in front of Lot 115 on the east side of Tukwila, restricting parking between the hours of 7:30 AM to 9:30 AM, and 2 PM to 3:30 PM on school days.

You are notified as a property owner within 300 feet that you may request the Traffic Safety Commission reconsider their decision and schedule a public hearing on this Limited Traffic Decision by a submitting written request for hearing within fourteen (14) days of the date of this letter to:

Newberg Traffic Safety Commission P.O. Box 970, 401 E. Third Street Newberg, OR 97132 TrafficSafety@newbergoregon.gov

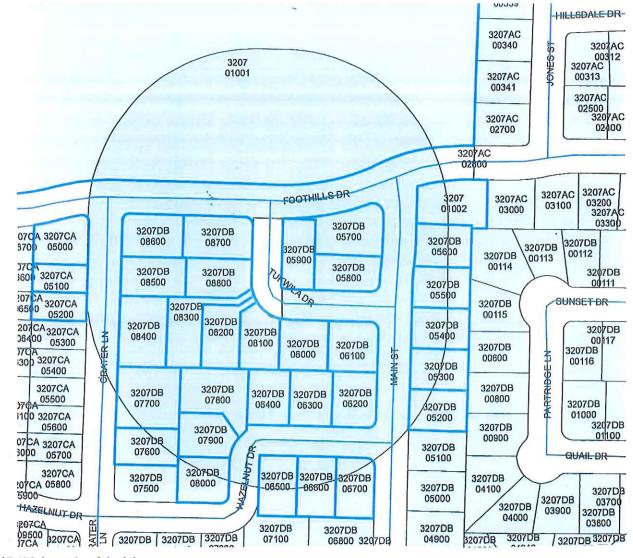
Any party appearing before the commission, either in written form or by oral testimony, has the authority to appeal the decision of the commission. If two or more owners request a public hearing, a special public hearing will be scheduled and property owners within 300 feet will be notified. Those persons who submit written or oral testimony at the special public hearing may appeal the final decision of the Commission to the Newberg City Council.

The appeal process is explained in §2.15.450 <u>Appeals of decisions</u> of the Newberg Municipal City Code, enclosed, or you may access it at the city website: <u>www.newbergoregon.gov</u>. Please call (503) 537-1221 if you have questions or require additional information.

Mary Newell Support Services Manager Newberg Traffic Safety Commission

Cc: Newberg City Engineering and Public Works

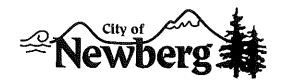
"Working Together For A Better Community-Serious About Service"



2.15.450 Appeals of decisions.

The decisions of the commission can be appealed to the city council. The commission will have an opportunity to reconsider its decision when a petition for appeal is filed. The following procedure is established for an appeal of a commission decision:

- A. Parties Who Can Appeal. Any party appearing before the commission, either in written form or by oral testimony, the city manager, and the chief of police have the authority to appeal the decision of the commission.
- B. Petition for Appeal and Time of Filing. Any decision of the commission can be appealed to the city council if such appeal is made within 14 days of the date of the decision. Such appeal will be made upon the petition prescribed for and approved by the commission stating the name of the party, indicating standing of party to appeal, demonstrating where the decision was in error, and what, if any, new evidence is available that was not available at the hearing.
- C. Reconsideration. Such petition will immediately be placed upon the next regular meeting of the commission for reconsideration of the decision. The commission may consider any new evidence presented, the record of the decision and any reason stated by the appellant. The commission may set the matter down for further hearing, affirm its previous decision, alter its decision in any manner it deems proper, or take no action.
- D. Appeal to the Council. If the decision is reaffirmed or no action is taken, or within 14 days after the commission has altered its decision, and the appealing party is notified of the commission's actions, the party filing the appeal will notify the city if they wish the matter to be appealed to the city council.
- E. Effect of Decision While Appeal or Reconsideration is Pending. The decision of the commission will be held in abeyance pending appeal to the city council. However, this does not affect the ability of the chief of police to enact any decision under the authority granted to him/her under NMC 2.15.470. [Ord. 2743 § 1, 10-3-11; Ord. 2733 Att. A, 2-7-11; Ord. 2427. Code 2001 § 32.27.]



Planning and Building Department

P.O. Box 970 • 414 E First Street • Newberg, Oregon 97132 503-537-1240 • Fax 503-537-1272 • www.newbergoregon.gov

MEMORANDUM

TO:

Newberg Traffic Safety Commission

FROM:

Jessica Pelz, AICP

SUBJECT:

Terra Estates subdivision transportation issues referred to TSC by City Council Order

No. 2013-0032

DATE:

January 28, 2014

Background

The city council recently approved the 44-lot Terra Estates subdivision, located at 3805 Terrace Drive in north Newberg. Several transportation related issues came up during the public hearing process, and city council referred two issues to the traffic safety commission (TSC) for their consideration:

- Whether stop signs should be placed at the Natalie Drive/Morris Street intersection, and
- Whether the TSC recommends the city pursue acquisition of right-of-way at the northeast corner of Terrace Drive and College Street to allow realignment or other improvements at the intersection.

The order also stated that the TSC may consider and recommend other improvements in the area to improve safety.

Summary of Issues

Terrace Drive/College Street

Testimony during the public hearing process raised concerns about safety at the Terrace Drive/College Street intersection. This intersection was redesigned as part of the Terrace Heights subdivision to the south to meet engineering sight distance standards. Realigning the intersection, as suggested by public testimony, would further extend sight distance. However, the intersection cannot be realigned without acquisition of right-of-way from an abutting private property owner. If the TSC feels the intersection should be realigned, they can recommend to the city council that the city begin the process of acquiring right-of-way.

There are other safety improvements that may be done at the intersection within the existing right-of-way, such as better marking the existing culvert at the northwest corner, removing existing vegetation, and/or filling or extending the culvert. Staff included a condition that the applicant coordinates with city staff, Yamhill County, and ODOT on potential safety improvements there as that will be the primary access point to the neighborhood.

Morris Street/Natalie Drive

Testimony included a request to place a stop sign at the Morris Street/Natalie Drive intersection. If the TSC determines that stop signs are warranted at this intersection, the developer has a condition of approval to pay to have them installed.

The adopted conditions of approval for the subdivision include the following two items:

- A.8. Terrace Drive/College Street Intersection Safety. Coordinate with city staff, Yamhill
 County, and ODOT on safety improvements to the intersection. Improvements may include
 installation of safety reflectors, additional striping, replacing landscaping, or additional paving,
 as warranted and approved by all agencies.
- B.1.d. Install stop signs at the intersection of Natalie Drive and Morris Street if found to be warranted by the Newberg Traffic Safety Commission.

Engineering Department Recommendation

The engineering department recommendations are as follows:

Terrace Drive/College Street

Per the conditions of approval for the Terra Estates subdivision, require the developer to work with the engineering department to extend the culvert and fill the ditch with gravel or pavement, as determined by the City Engineer. Further, it is recommended that the City begin looking into, and coordinating with ODOT on the acquisition of additional right-of-way for a future intersection realignment.

Morris Street/Natalie Drive

No action is required at this point. A stop sign is not warranted. It is recommended that once more development occurs in the area that this intersection be reevaluated to determine if stop signs are warranted.

Attached:

- Order No. 2013-0032 with Findings & Conditions
- Aerial photo of the Terrace Drive/College Street intersection
- Engineering memo (stop sign warrant analysis & intersection safety study)
- Traffic counts for Natalie Dr/Morris St



ORDER No. 2013-0032

AN ORDER AFFIRMING PLANNING COMMISSION APPROVAL OF THE TERRA ESTATES SUBDIVISION LOCATED AT 3805 TERRACE DRIVE

RECITALS:

- 1. Mike Hanks, member of Del Boca Vista, LLC, submitted an application for tentative subdivision approval for the Terra Estates subdivision to include 44 lots and one tract located at 3805 Terrace Drive, Yamhill County Tax Lot 3207-00500. The tract, Tract A, would be used for a stormwater quality/detention pond to serve the subdivision.
- 2. The planning commission held hearings on August 8, 2013, and September 12, 2013, to consider the proposal. On September 12, 2013, the planning commission adopted Order No. 2013-13 approving the Terra Estates subdivision at 3805 Terrace Drive with 44 lots and one tract.
- 3. On September 26, 2013, Jane Greller submitted an appeal to the city of the planning commission decision to approve the Terra Estates subdivision.
- 4. After proper notice, the Newberg City Council held a hearing on November 18, 2013, to consider the appeal of the Terra Estates subdivision. The city council heard public testimony, closed public testimony, and continued the hearing at the point of deliberation to December 16, 2013. On December 16, 2103, the city council deliberated on the proposed subdivision. The city council finds the proposed subdivision meets the applicable criteria as shown in the findings in Exhibit "A" and must comply with the conditions of approval in Exhibit "B".

THE CITY OF NEWBERG ORDERS AS FOLLOWS:

- 1. The tentative subdivision plan application SUB2-12-003 for the Terra Estates subdivision is hereby approved, subject to the conditions contained in Exhibit "B". Exhibit "B" is hereby adopted and by this reference incorporated.
- 2. The findings attached as Exhibit "A" are hereby adopted and by this reference incorporated.

- 3. The following two items are referred to the traffic safety commission for their consideration: (1) whether stop signs should be placed at the Natalie Drive/Morris Street intersection, and (2) whether they recommend the city pursue acquisition of right-of-way at the northeast corner of Terrace Drive and College Street to allow realignment or other improvements at the intersection. The traffic safety commission may also consider and recommend other improvements in the area to improve safety.
- FEFFECTIVE DATE of this order is the day after the adoption date, which is: December 17, 2013.

 ADOPTED by the City Council of the City of Newberg, Oregon, this 16th day of December, 2013.

Norma / Alley, MMC, City Recorder

ATTEST by the Mayor this 17th day of December, 2013.

Bob Andrews, Mayor

Findings – File SUB2-12-003 – Terra Estates Subdivision

I. Applicable Subdivision Criteria: Newberg Development Code 15.235.060(A).

The Director (Type II) or Planning Commission (Type III) shall approve a subdivision of four parcels or more under a Type II or Type III procedure if the resulting parcels comply with the following approval criteria:

1. Approval does not impede the future best use of the remainder of the property under the same ownership or adversely affect the safe and healthful development of such remainder or adjoining land or access thereto.

Finding: This criterion requires that a subdivision can't create safety problems for future development of any portion of the property not developed nor for development or redevelopment of adjacent properties. This is what gives the city the right to require streets and utilities to be "to and through" the property being developed to the edges of adjacent undeveloped properties. In other words, if a property were going to be subdivided but did not put a road to the edge of their property to allow the adjacent undeveloped property to have access, it would be in violation of this criterion. Similarly, if public utilities were not extended to a point adjacent to the neighboring property, it would be an unacceptable adverse impact on the development potential of the adjacent property. In this particular case, the roads and public utilities are planned to be extended through the lot to the east and west edges to allow for future development of adjacent properties, and the entirety of the lot is planned for development so there is no remainder.

This is also a land use criterion that gives the city the ability require development to meet other applicable parts of the development code related to street improvements and public utilities. This is how the city may require such things as public utility hookups, sidewalks, street trees, and public pathways necessary for safety.

This criterion does not require correction of existing problems not caused by or affected by the development. It is a reasonable interpretation that the criterion could be used to require improving health or safety issues that are worsened by the subdivision. However, those requirements (1) must be directly tied to the impact of the development, and (2) must be roughly proportional to those impacts.

Testimony through the planning commission process raised concerns about safety at the Terrace Drive/College Street intersection. This intersection was redesigned as part of the Terrace Heights subdivision to the south to meet engineering sight distance standards. The applicant's traffic study analyzed this intersection. The traffic study showed that the subdivision would add approximately 31 trips to this intersection in the p.m. peak hour. This would roughly double the turning movements through the intersection. The traffic study did not recommend any improvements to the intersection.

Public testimony raised concerns about vegetation along the east side of College Street blocking sight distance for northbound vehicles on College Street turning left onto Terrace Drive. This vegetation previously had been trimmed as part of the Terrace Heights subdivision's intersection improvements. Public testimony requested that the intersection be realigned to the north to further extend sight distance. However, the intersection cannot be realigned without acquisition of right-of-way from an abutting private property owner, which would be beyond the scope of what could be

required from the private developer. Additional potential solutions to this issue include replacing the landscaping in this stretch so that it does not continue to be an issue, or restriping the intersection to move the turn lane further north. Replacing the landscaping would require cooperation of the abutting property owner; restriping the intersection would require approval from ODOT. Either replacing the landscaping or restriping the intersection would address the impact of adding traffic to the intersection, and would be proportional to the impact of subdivision.

Public testimony also raised concerns about an existing culvert on the north side of the Terrace Drive/College Street intersection. Testimony stated that southbound vehicles on College Street turning right onto Terrace Drive sometimes veer into that ditch, likely because of the acute angle of the intersection. Realigning the intersection to the north would resolve this issue, however this also would require acquisition of land from the abutting property owner, which again would be beyond the scope of what could be required of a private developer. Additional potential solutions include placing reflectors or other markers at the edge of the pavement to better mark the ditch, or adding paving within the existing right-of-way. Because the intersection is partly Yamhill County jurisdiction and partly ODOT jurisdiction, approval of these jurisdictions would be needed for any physical improvements. Either marking the ditch or adding pavement would address the impact of adding traffic to the intersection, and would be proportional to the impact of the subdivision. Therefore, a condition of this subdivision is:

Terrace Drive/College Street Intersection Safety. Coordinate with city staff, Yamhill County, and ODOT on safety improvements to the intersection. Improvements may include installation of safety reflectors, additional striping, replacing landscaping, or additional paving, as warranted and approved by all agencies.

Other public testimony raised concerns about potential safety issues on Morris Street. Morris Street is a local street that currently dead ends just north of Natalie Drive. The subdivision would extend Morris Street to the north. The applicant's traffic study shows that the subdivision will add approximately 13 trips in the p.m. peak hour to Morris Street. The traffic study did not recommend any improvements to Morris Street.

One request from public testimony was for placement of stop signs at the Natalie Drive/Morris Street intersection. Information from the Engineering Services Department contained in the record shows that stop signs where warranted can improve safety, but where not warranted can actually harm safety. That information also summarized engineering warrants for stop signs. At this point, it is not clear whether that intersection would meet the stop sign warrants. Morris Street currently dead ends just north of Natalie Drive with only a few houses accessing it north of Natalie Drive. Thus, traffic from the subdivision will generate a very high percentage of the trips on one leg of the four-way intersection. Therefore the need for a stop sign would be directly tied to the impact of the subdivision and would be roughly proportional to the impacts. The traffic safety commission can determine whether stop signs are warranted. Therefore, a condition of approval is:

Install stop signs at the intersection of Natalie Drive and Morris Street if found to be warranted by the Newberg Traffic Safety Commission.

With these conditions, the subdivision does not impede the future best use of the remainder of the property under the same ownership or adversely affect the safe and healthful development of such remainder or adjoining land or access thereto.

2. The subdivision complies with this code including but not limited to 15.340.010 through 15.440.080 and 15.235.030 et seq.

Finding: Following compliance with the conditions of approval as shown in Exhibit "B", the subdivision complies with all applicable requirements of the code. See sections II through IV for specific development code standards and findings.

3. Either:

- a. Improvements required to be completed prior to final plat approval; or
- b. The sub divider will substantially complete, as defined by city policies, required improvements prior to final plat approval, and enter into a performance agreement to complete the remaining improvements. The performance agreement shall include security in a form acceptable to the city in sufficient amount to insure completion of all required improvements; or
- c. A local improvement district shall have been formed to complete the required improvements; or
- d. The required improvements are contained in a city or other government agency capital improvement project that is budgeted and scheduled for construction.

Finding: The required improvements will either be completed prior to final plat or the developer will enter into an agreement with the city for the remainder of the improvements to be completed. In this case, public improvements required for the subdivision include: construction of Morris Street northward through the subdivision; construction of both east-west roads through the subdivision; a three-quarter street improvement to Terrace Drive along the frontage of the subdivision; a half street improvement to Petunia Drive; construction of city water, sewer, and stormwater infrastructure throughout the subdivision; construction of a stormwater quality/detention facility to serve the subdivision; and any required safety improvements to the Terrace Drive/College Street intersection. All street improvements will include sidewalk, curb, gutter, and planting strip.

- II. Applicable Lot Requirement: Newberg Development Code 15.405.010, Lot Area; Lot Areas per Dwelling Unit
 - A. In the following districts, each lot or development site shall have an area as shown below except as otherwise permitted by this code:
 - 1. In the R-1 district, each lot or development site shall have a minimum area of 5,000 square feet or as may be established by a subdistrict. The average size of lots in a subdivision intended for single-family development shall not exceed 10,000 square feet.
 - D. Lot size averaging is allowed for any subdivision. Some lots may be under the minimum lot size required in the zone where the subdivision is located, as long as the average size of

all lots is at least the minimum lot size.

Finding: The property is all zoned R-1. The size of the lots in the proposed subdivision range from 4,910 square feet to 7,629 square feet. Due to the east-west road alignment and resulting lot configuration, one lot is below the 5,000 square foot lot size. However, the average size of all lots in the subdivision is 5,656 square feet, which meets this criterion.

III. Applicable Lot Requirements – Newberg Development Code 15.405.030 Lot Dimensions and Frontage

- A. Width. Widths of lots shall conform to the standards of this code.
- B. Depth to Width Ratio. Each lot and parcel shall have an average depth between the front and rear lines of not more than two and one-half times the average width between the side lines. Depths of lots shall conform to the standards of this code. Development of lots under 15,000 square feet are exempt from the lot depth to width ratio requirement.
- C. Area. Lot sizes shall conform to standards set forth in this code. Lot area calculations shall not include area contained in public or private streets as defined by this code.

D. Frontage.

- 1. No lot or development site shall have less than the following lot frontage standards:
 - a. Each lot or development site shall have either frontage on a public street for a distance of at least 25 feet or have access to a public street through an easement that is at least 25 feet wide. No new private streets, as defined in NMC 15.05.030, shall be created to provide frontage or access.
 - c. Each lot in an R-1, AI, or RP zone shall have a minimum width of 50 feet at the front building line.

Finding: Each proposed lot meets the required width for the R-1 zone and all have adequate frontage on a public street. Lots 7, 8, 25, 34, and 36 must have buildings facing the wide section of the lot in order to comply with the criterion. Therefore, lot 7 is conditioned to have the house facing Terrace Drive; lots 25 and 34 are conditioned to have houses facing Morris Street; and lot 36 and lot 8 are conditioned to have a house facing the east-west road.

IV. Applicable Development Standards

NDC 15.510.040: Water Supply. All lots and parcels within subdivisions and partitions shall be served by the water system of the City of Newberg.

NDC 15.510.050: Sewage. All lots and parcels within subdivisions and partitions shall, where practicable, as determined by the Director, in accordance with the

provisions of this Code, be served by the sewage system of the City.

NDC 15.510.060: Land Surface Drainage. Such grading shall be done and such drainage facilities shall be constructed by the land divider as are adequate for the purpose of proper drainage of the partition or subdivision, of areas affected thereby, and for the preservation of healthful and convenient surroundings and conditions for residents of the subdivision or partition, and for the general public, in accordance with specifications adopted by the City Council under 15.510.030.

NDC 15.505.030: Streets and Alleys. The land divider or developer shall grade and pave all streets and alleys in the subdivision or partition to the width specified in 15.505.060, and provide for drainage of all such streets and alleys, construct curbs and gutters within the subdivision or partition in accordance with specifications adopted by the City Council under 15.510.030. Such improvements shall be constructed to specifications of the City under the supervision and direction of the Director. It shall be the responsibility of the land divider or developer to provide street signs

NDC 15.505.040: Existing Streets. A subdivision, partition or development requiring a Type II design review abutting or adjacent to an existing road of inadequate width, shall dedicate additional right-of-way to and improve the street to the width specified in 15.505.060.

NDC 15.505.210: Sidewalks. Sidewalks shall be located and constructed in accordance with the provisions of 15.510.030. Minimum width is five feet.

NDC 15.505.220.(A): Public Walkways. The review body for a design review or land division may require easements for and construction of public walkways where such walkway is needed for the public safety and convenience or where the walkway is necessary to meet the standards of this code or a walkway plan. Public walkways are to connect to cul-de-sacs, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas of such design, width, and location as reasonably required to facilitate public use. Where possible, said dedications may also be employed to accommodate public utilities.

NDC 15.510.070: Street Trees. Street trees shall be provided adjacent to all public rights-of-way abutting or within a subdivision or partition. Street trees shall be installed in accordance with the provisions of 15.420.010(B) (4).

Finding: All of the proposed lots will be served by an extension of city sewer and water facilities. The existing 8-inch sanitary sewer line in Terrace Drive will be extended north and west "to and through" the property in Terrace Drive and the northern east-west road in order to serve future development on adjacent properties. The sewer line will also be extended west on Drèa's Way and south down Morris Street from the northern east-west road. The existing 8-inch water line will be extended north in both Terrace Drive and Morris Street, looped through the site, and similarly extended "to and through" to the edges of the property. There is an existing fire hydrant at the north

edge of the property in Terrace Drive; two new fire hydrants are planned for the north and south boundaries of Morris Street in the subdivision. The applicant submitted a preliminary fire flow report indicating there was adequate domestic and fire flow capacity. The applicant will be conditioned to submit further calculations conforming to Fire Department and Building Division standards indicating minimum service requirements will be met.

In accordance with the city's new stormwater standards, the development will include a tract set aside for a stormwater quality/detention pond facility to serve the subdivision. There will be new stormwater lines installed at various points in the subdivision to collect the stormwater. Stormwater will be conveyed from the detention pond to the existing creek. As conditioned, the outfall will have erosion control measures to protect against water velocity and the design must be approved by the Engineering Services Department. The detention pond facility will be privately owned and maintained with a public storm drainage easement, and must be designed to Clean Water Services Standards and approved by the Engineering Services Department. A private maintenance agreement through a homeowners association will be required, as conditioned.

Morris Street and the two east-west streets are all standard local streets with a 54-foot right-of-way. All will be fully improved with sidewalk, curb, gutter, and planter strip. As conditioned, all sidewalks are setback behind the planter strip. Terrace Drive required a right-of-way dedication of 10 feet along the frontage, and will be improved with a three-quarter street improvement to widen the paved area and add sidewalk, curb, gutter, and planter strip along the frontage. Petunia Drive required a right-of-way dedication of 7-15 feet along the frontage, and will be improved with a half street improvement to widen the paved area and add sidewalk, curb, gutter, and planter strip along the frontage. All public streets will have street trees in accordance with the code. In addition, a paved pedestrian path will be built in the public access easement between lots 4, 5, 9, and 10. The pedestrian path will be privately maintained and maintenance responsibility will need to be included in the CC&Rs, as conditioned.

NDC 15.505.160: Platting standards for blocks. B. Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.

Zone(s)	Maximum Block Length	Maximum Block Perimeter
R-1	800 feet	2,000 feet
R-2, R-3, RP, I	1,200 feet	3,000 feet

Finding: The proposal meets the block length and perimeter standard. The northern east-west road is approximately 620 feet long from Terrace Drive to the west edge of the property. Morris Street is approximately 722 feet long from the northern east-west road south to Natalie Drive. The block bounded by the northern east-west road/Morris Street/Drèa's Way/Terrace Drive is approximately

1325 feet in perimeter length. The block bounded by Drèa's Way/Morris Street/Natalie Drive/Dahlia Street/Petunia Drive/Terrace Drive is approximately 1792 feet in perimeter length. The block length standards are met, and the tentative plat shows a paved pedestrian path between lots 4, 5, 10, and 11 that will contribute to the overall connectivity through the subdivision.

V. Newberg Comprehensive Plan Sections:

Public Facilities and Services, All Facilities and Services Policy #1.h. – New residential areas shall have: paved streets, curbs, pedestrian ways, water, sewer, storm drainage, street lights and underground utilities.

Finding: The policy above is not a mandatory approval criteria; however, according to the finding above for Development Code requirements for infrastructure, the proposed subdivision meets the requirements to have paved streets, curbs, pedestrian ways, water, sewer, storm drainage, street lights and underground utilities, and meets the intent of the Newberg Comprehensive Plan.

Newberg Comprehensive Plan III.2.a. (Plan Classifications) - Low Density Residential (LDR)

The objective of this designation is to provide a wide range of housing types and styles, while allowing for an overall density of up to 4.4 units per acre.

Typical housing types will include single-family attached and detached housing. Clustered housing areas within Planned Unit Developments or condominiums must include adequate open areas to maintain the low overall density of this classification.

Services shall include improved streets, underground utilities (except electrical transmission lines), street lighting, sidewalks, and in some cases, bikeways.

Finding: The subdivision tentative plat decision is a limited land use decision within the definition 197.015 (12). ORS 197.195 (1) states,

A limited land use decision shall be consistent with applicable provisions of city or county comprehensive plans and land use regulations. Such a decision may include conditions authorized by law. Within two years of September 29, 1991, cities and counties shall incorporate all comprehensive plan standards applicable to limited land use decisions into their land use regulations. A decision to incorporate all, some, or none of the applicable comprehensive plan standards into land use regulations shall be undertaken as a post-acknowledgment amendment under ORS 197.610 to 197.625. If a city or county does not incorporate its comprehensive plan provisions into its land use regulations, the comprehensive plan provisions may not be used as a basis for a decision by the city or county or on appeal from that decision. [emphasis added]

The criteria for approval of the subdivision are contained in Newberg Development Code Section 15.235.060. There is nothing in the language of these criteria, other criteria in the development code, or any other land use regulations to indicate that compliance with Newberg Comprehensive Plan III.2.a. is required for a limited land use decision. The language of the plan provision itself is aspirational ("the objective of this designation" and "allowing for an overall density") rather than mandatory. Thus, regardless of whether the council were to find compliance or noncompliance with

this policy, the city has not incorporated the provision cited above into its land use regulations and therefore it may not be used as a basis for the decision on this subdivision.

- VI. House Design: House design and other particular details of single-family residential development on individual lots is not a subdivision criteria for approval. However, a letter from Marc Willcuts to the planning pommission was included into the record on August 8, 2013 in testimony from Mr. Reitz. The letter refers to the applicant's offer to include the following items in CC&Rs in exchange for neighbor support of the subdivision:
 - 1500 square feet minimum house size
 - Minimum two car garages
 - Lap siding; no vinyl
 - Front yard to have sprinklers and irrigation
 - Minimum of three exterior colors on house
 - Wood trimmed windows on front of house

At the hearing on August 8, 2013, the applicants indicated they would be willing to do these items if their project was approved, but not if the project was subjected to an extended appeal. The city cannot require such conditions because aesthetics are not related to the quasi-judicial criteria for a subdivision; however, the applicant can agree to add such things in CC&Rs as a condition if they so choose. The planning commission modified condition C.3.d.in the staff report to reflect these developments, as follows:

- ➤ [Documents required:] C.3.d. A final draft copy of Codes, Covenants and Restrictions (CC&Rs) for the subdivision. Planning staff will review the proposed CC&Rs for compliance with City Code prior to recordation. The CC&Rs must include the following:
 - o Maintenance responsibility for the paved pedestrian path between lots 4, 5, 10, and 11.
 - o If the subdivision has final preliminary plat approval by March 12, 2014, the CC&Rs shall include the following design elements:
 - 1500 square feet minimum house size
 - Minimum two car garages
 - Lap siding; no vinyl
 - Front yard to have sprinklers and irrigation
 - Minimum of three exterior colors on house
 - Wood trimmed windows on front of house
- VII. Conclusion: Based on the above findings, the application meets the goals and policies of the Newberg Comprehensive Plan and the required criteria within the Newberg Development Code for a subdivision, subject to completion of the attached conditions.

Conditions of Approval – File SUB2-12-003 – Terra Estates Subdivision

- A. The applicant must provide the following information for review and approval <u>prior</u> to construction of any improvements:
 - 1. Revised Tentative Plan: Provide a revised tentative subdivision plan that shows the following:
 - a. Name the northern east-west road. Note that the name cannot be Camellia Road, as the new road does not line up with the existing Camellia Road.
 - Construction Plans: Submit engineered construction plans for review and approval of all public utilities. Plans should be drawn to show storm information on one sheet; water and sanitary on another sheet. Please note that additional Engineering Services Department plan review application and fees apply for review of plans. The plans must note the following:
 - a. Sanitary Sewer/Water:
 - i. Submit detailed utility construction plans for review and approval for all public water meters, sanitary sewer mains, and sanitary sewer laterals.
 - ii. Sanitary sewer facilities in Terrace Drive shall be constructed to serve future development in the basin. A basin plan shall be prepared by engineer of record and submitted to the Engineering Services Department.
 - iii. An abbreviated fire flow calculation dated July 25, 2013 for the project site was submitted by the applicant. Fire flow calculations will be required to be submitted to the Engineering Services Department for the proposed subdivision that conform to the City of Newberg Fire Department standards, indicating that each lot in the new subdivision will meet the minimum service requirements.
 - iv. Domestic water flow calculations will be required to be submitted to the Engineering Services Department for the proposed subdivision that conform to the City Building Division requirements indicating that minimum service pressures are available at the future highest fixtures in the development.

b. Streets:

i. Full improvements for Morris Street, the northern east-west road, and Drèa's Way, including curb, gutter, planter strip, and sidewalk. Note: all sidewalks are to be setback behind the planter strip.

- ii. Half street improvement to the north side of Petunia Drive along the frontage, to include curb, gutter, planter strip, and sidewalk. Note: the sidewalk must be setback behind the planter strip.
- iii. Street names should be "Morris Street" and "Drèa's Way", plus a new street name for the northern east-west road.
- iv. Each street intersection in the proposed subdivision shall meet AASHTO vertical and horizontal intersection sight distance requirements, as verified by the engineer of record.
- v. Terrace Drive is to be constructed with the proper structural road section applicable to its designation to provide a three-quarter street improvement as depicted by the typical section on the "Site and Utility Plan" plus additional paving and improvements as necessary to construct a 28-foot wide street matching the construction profile of the southern portion of Terrace Drive adjacent to the Terrace Heights subdivision.

c. Stormwater:

- i. The proposed stormwater quality/detention pond facility shall be fully constructed with the first phase of development. Applicant's Civil Engineer is to meet with Engineering Services Department Staff to review the proposed design. The stormwater facility should be designed according to Clean Water Services standards, and the control structure shall discharge into a rock armored open channel/ditch to transmit the stormwater flows to the receiving stream. The plan for the stormwater facility shall include a secure fence around the pond.
- ii. The proposed stormwater tract shall be under ownership separate from the City and subject to a recorded public storm drainage easement over its entirety. A City standard private stormwater facility maintenance agreement shall be completed by the applicant and recorded for private maintenance of the stormwater facility. The agreement shall state the responsible party(s) for the required facility maintenance.
- iii. All stormwater detention and water quality hydraulic and sediment control structures shall have adequate maintenance access for the City vactor truck within 10 feet of the proposed structure.
- iv. Delineate the stream corridor and provide a plan to protect the stream corridor during site grading and construction.
- v. The applicant shall coordinate with City Engineering staff to prepare a protocol for the maintenance of the stormwater quality/detention pond and water quality swale.

- 3. Stormwater Facility Maintenance Agreement: Provide a stormwater facility maintenance agreement for private maintenance of the stormwater facility. The agreement must state the responsible party(s) for the required facility maintenance.
- 4. Geotechnical Report. Provide a geotechnical engineering report for the subdivision.
- **5. Grading:** If required, obtain a DEQ 1200-C permit and a city grading permit prior to site grading.
- 6. Stream Corridor Protection Plan. Provide a plan to protect the stream corridor during construction with erosion control measures.
- 7. **Stormwater Outfall.** Provide an erosion control plan for the proposed stormwater outfall area into the existing creek to reduce water velocity and speed.
- 8. Terrace Drive/College Street Intersection Safety. Coordinate with city staff, Yamhill County, and ODOT on safety improvements to the intersection. Improvements may include installation of safety reflectors, additional striping, replacing landscaping, or additional paving, as warranted and approved by all agencies.
- B. The applicant must complete the following <u>prior</u> to final plat approval.
 - 1. Substantially Complete the Construction Improvements: Prior to final plat approval, the applicant must substantially complete the construction improvements and secure for them in accordance with city policy. Complete construction and call for a walk-through inspection with the Engineering Services Department (503-537-1273). In addition to those items listed below, the inspector will also be looking for completion of items such as street signs, street lights, etc.
 - a. Construct all water meters, sanitary sewer mains, and sanitary sewer laterals as shown on the approved utility construction plans.
 - b. Construct the stormwater system as shown in the approved plans.
 - c. Construct all public roads and the public pathway identified on the approved tentative plat.
 - d. Install stop signs at the intersection of Natalie Drive and Morris Street if found to be warranted by the Newberg Traffic Safety Commission.
 - 2. Street Tree Bond: Provide a landscape plan that identifies all planned tree species for street trees in accordance with NDC 15.420.010. A landscape bond will be required for installation of street trees prior to final plat approval.
 - 3. Existing Wells/Septic: Decommission any wells or septic tanks currently on the property.

C. Final Plat Application: In accordance with NDC 15.235.150, submit the following for City review of the final plat application. Construction improvements should be substantially complete at this point.

1. Application Materials:

- a. Type I application form (found either at City Hall or on the website www.newbergoregon.gov in the Planning Forms section) with the appropriate fees
- b. A current title report (within 6 months old) for the property. Include copies of all existing easements and CC&Rs that pertain to the property.
- c. A written response to these Conditions of Approval that specifies how each condition has been met.
- d. Two blue-line copies of the final subdivision plat for preliminary review by the City Engineering Services Department. The Engineering Services Department will make red-line comments on these sheets for your surveyor/engineer to correct prior to printing final Mylar copies.

2. Dedications/Easements Required: The plat must show the following:

- a. 10 ft public utility easements along all street frontages.
- b. A 15-foot wide public access and storm drainage easement between lots 4, 5, 9, and 10.
- c. The storm drainage easement along the northern edge of the subdivision as shown on the tentative plat. In addition, the entirety of Tract A shall have a public surface water and public storm drainage easement.
- d. Right-of-way as shown on the preliminary plat for Terrace Drive and Petunia Drive improvements.

3. Documents Required: Provide the following documents for review and approval:

- a. Stormwater facility maintenance agreement for private maintenance of the stormwater facility. The agreement must state the responsible party(s) for the required facility maintenance.
- b. A signed and notarized performance agreement that assures construction and performance in accordance with the approved final plans.
- c. A bond for street tree planting in an amount to be approved by the Planning Division.
- d. A final draft copy of Codes, Covenants and Restrictions (CC&Rs) for the subdivision. Planning staff will review the proposed CC&Rs for compliance with City Code prior to recordation. The CC&Rs must include the following:
 - i. Maintenance responsibility for the paved pedestrian path between lots 4, 5, 10, and 11.

- ii. If the subdivision has final preliminary plat approval by March 12, 2014, the CC&Rs shall include the following design elements:
 - (a) 1500 square feet minimum house size
 - (b) Minimum two car garages
 - (c) Lap siding; no vinyl
 - (d) Front yard to have sprinklers and irrigation
 - (e) Minimum of three exterior colors on house
 - (f) Wood trimmed windows on front of house
- 4. Final Mylar Copies of the Subdivision Plat: Submit final mylar copies of the corrected final subdivision plat (after red-line corrections have been made).
 - a. Two sets (one original and one copy) of the plat. Original plats shall be in substantial conformity to the approved tentative plan and shall conform to the Yamhill County Surveyor's specifications and requirements. Scale requirements shall be the same as specified for the tentative plans. Note:

 Newberg Development Code requires a mylar copy of the recorded plat. To complete this requirement, you may either record a mylar copy of the plat for the city or you may have your surveyor/engineer print a copy of the recorded plat on mylar. This requirement must be met to complete the final plat process, and building permits will not be issued until the mylar copy is received.
- D. The final plat process must be completed <u>prior</u> to issuance of any building permits. The City will review the final plat application after the applicant has completed all of the conditions of approval listed above.
 - 1. City Review: In accordance with NDC 15.235.160 and 15.235.180, Planning staff shall determine that:
 - a. Streets, roads, and alleys for public use are dedicated without any reservation or restriction other than reversionary rights upon vacation of any such street or road and easements for public utilities.
 - b. The proposal complies with this code.
 - c. The plat is in substantial conformity with the provisions of the tentative plan for the subdivision, as approved.
 - d. The plat contains a donation to the public of all common improvements, including but not limited to streets, roads, parks, sewage disposal and water supply systems.
 - e. Explanations of all common improvements required as conditions of approval of the tentative plan of the subdivision have been accounted for and referenced on the plat.
 - f. There will exist an adequate quantity and quality of water and an adequate sewage disposal system to support the proposed use of the land described in the plat.
 - g. Either:
 - i. Improvements as required by this code or as a condition of tentative plan approval have been filed with the Director; or

- ii. A performance agreement (bond) or suitable substitute as agreed upon by the city and applicant has been filed with the Director in sufficient amount to insure the completion of all required improvements; or
- iii. A petition for improvements has been properly executed by the applicant who is effecting the subdivision and will be assessed for said improvements.
- h. Taxes, as well as public liens, assessments and fees, with respect to the subdivision area have been paid, or adequate guarantee has been provided assuring said taxes, liens, assessments and fees will be paid prior to recordation.
- i. The subdivider has entered into agreement with the city relating to completion of improvements, payment of sewer and water hookup fees, inspection fees, public lands payments, monumentation or any other elements deemed relevant to the purpose of this or any other city ordinance, state statute or federal law.
- j. If the conditions set at the time of tentative land division approval are not fulfilled and the final plat or final map is not recorded by the tentative plan expiration date, the tentative land division approval is null and void.
- 2. Required Signatures: According to NDC 15.235.180, approval of a final subdivision plat must be acknowledged and signed by the following:
 - a. Planning and Building Director
 - b. The County Assessor
 - c. The County Surveyor
 - d. The City Recorder
- 3. Recording: Deliver the approved subdivision plat to the office of the County Clerk for recording. The County Clerk's office is located at 414 NE Evans St, McMinnville, OR 97128.
- 4. Completion: Return an exact mylar copy of the recorded plat to the Director to complete the subdivision process. Note: the city will not issue building permits or other permits for construction on individual lots until the mylar copy is returned.

E. Development Notes:

- 1. **Postal Service:** The applicant shall submit plans to the Newberg Postmaster for approval of proposed mailbox delivery locations. Contact the Newberg Post Office for assistance at 503-554-8014.
- 2. PGE: PGE can provide electrical service to this project under terms of the current tariff which will involve developer expense and easements. Contact the Service & Design Supervisor, PGE, at 503-463-4348.
- **Frontier:** The developer must coordinate trench/conduit requirements with Frontier. Contact the Engineering Services Department, Frontier, at 541-269-3375.
- **4. Waste Management:** Contact Waste Management for garbage service to the new lots.

Exhibit "B" to Order No. 2013-0032

- 5. Addresses: The Planning Division will assign addresses for the new subdivision. Planning Division staff will send out notice of the new addresses after they receive a recorded mylar copy of the final subdivision plat.
- 6. Building Plans for Lots 7, 8, 25, 34, and 36: The building plans for these lots must show the front of the house facing the widest portion of the lot. Lot 7 must face Terrace Drive, lots 25 and 34 must face Morris Street, and lots 7 and 36 must face the northern east-west road.
- 7. **Street Trees on Corner Lots:** Street trees on corner lots shall be adjusted to not interfere with street signs as necessary.
- **8. Fence:** Consider constructing a six foot tall opaque fence along the southern boundary of the subdivision.





MEMORANDUM

ENGINEERING DEPARTMENT

P.O. Box 970 • 414 E. First Street • Newberg, Oregon 97132 Tel 503.537.1240 • Fax 503.537.1277

January 31, 2014

To: Newberg Traffic Safety Commission

Cc: Jay Harris, PE, City Engineer; Brian Casey, PD Chief; Mary Newell, PD Support Services

Manager

From: Jason Wuertz, PE, Civil Engineer

RE: TSC-14-002 \Stop Sign Request at Morris & Natalie - Safety Concerns at Terrace &

HWY219

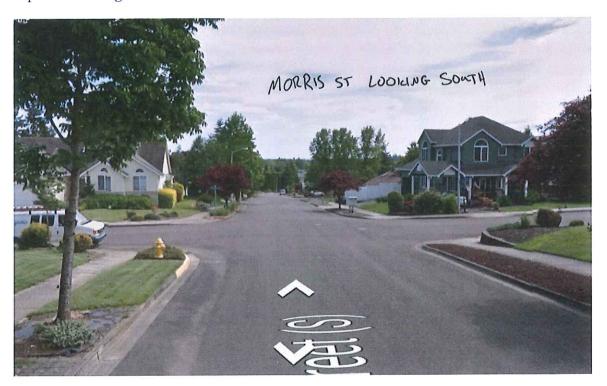
As requested by the City Council, and as part of the Terra Estates Subdivision conditions of approval, the Engineering Department has completed a review of the two issues specified. The first issue is regarding the need for a stop sign to be installed at Natalie Dr. & Morris St. The second issue is to determine potential safety improvements necessary for the Terrace Dr. and HWY 219 intersection. The following is a report with recommendations from the engineering department.

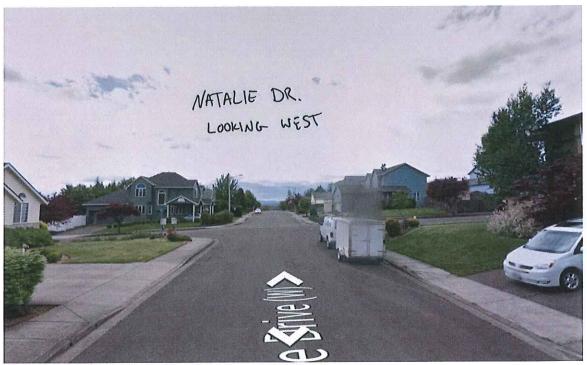


"Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community."

NATALIE DRIVE AND MORRIS STREET INTERSECTION STOP SIGN ANALYSIS

Traffic counts were collected between January 14th and January 16th, 2014, to help determine if warrants for stop signs are met at the intersection of Natalie Drive and Morris Street. Both legs of the intersection are local residential streets with a speed limit of 25 miles per hour (MPH). Below are photos showing the two streets at the intersection.





"Working Together for a Better Community - Serious About Service" "Traffic Safety Mission Statement: To give the citizens of Newberg a forum to voice traffic safety concerns, evaluate related issues, provide a liaison with the City and promote traffic safety within the community." Page | 2

TSC-14-002 - Terrace Neighborhood Saftey Requests.docx

The traffic data from the previously mentioned dates at this intersection are summarized as follows:

Traffic Data on Morris Street					
Block	South of Natalie				
85% Speed	Southbound	Northbound			
	22.1 MPH	19.8 MPH			
ADT =	69 (49%)	73 (51%)			
AM Peak =	6	6			
PM Peak =	6	6			

Traffic Data on Natalie Drive					
Block	East of Morris St		West of Morris St		
85% Speed	Westbound	Eastbound	Westbound	Eastbound	
	23.2 MPH	23.4 MPH	23.5 MPH	21.1 MPH	
ADT =	50 (48%)	54 (52%)	40 (52%)	37 (48%)	
AM Peak =	3	7	4	3	
PM Peak =	6	6	3	3	

Vehicle Crash Data in Last Five (5) Years					
Incident Date	Motor Vehicle Crash	Comment	Injury		
N/A	0		0		

Upon review, the traffic volume is very low. The 85 percentile speed did not exceed 24 MPH in all directions near that intersection. The legal speed is 25 MPH in residential.

There are no known pedestrian issues near the intersection. Crash data in the last five (5) years did not reveal any major concerns at the intersection.

Stop signs are not warranted at this time. It is recommended that the intersection be reevaluated at a later date after additional development occurs in the area. Please contact me if you have any questions. Thank you.

MUTCD - Section 2B.07 (2009 Edition, with Revisions 1 and 2, dated May 2012)

Section 2B.07 Multi-Way Stop Applications

Support:

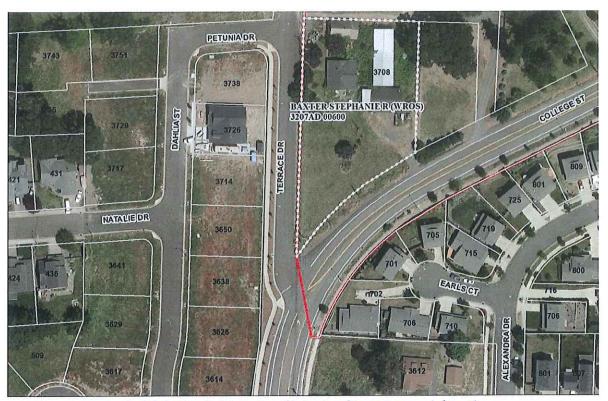
- Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
- The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications. Guidance:
- os The decision to install multi-way stop control should be based on an engineering study.
- The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
 - A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
 - B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
 - C. Minimum volumes:
 - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
 - 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
 - D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

- Other criteria that may be considered in an engineering study include:
 - A. The need to control left-turn conflicts:
 - B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
 - C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
 - D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

TERRACE DRIVE AND HIGHWAY 219 INTERSECTION SAFETY ANALYSES

The Newberg City Council conditioned the Terra Estates Subdivision to coordinate with city staff, Yamhill County, and ODOT on safety improvements to the intersection of Terrace Drive and Highway 219. These improvements may include installation of safety reflectors, additional striping, replacing landscaping, or additional paving as warranted and approved by all agencies. Additionally, a concerned resident identified two concerns. One is regarding the ditch and culvert at the sharp northeast corner of the intersection, and the second is a potential tree along 219 which may be impeding sight distance.



Aerial showing the intersection of interest and property owner information

The intersection of Terrace Drive and Highway 219 (College Street) does not meet at a 90 degree angle. Whenever possible, an intersection should meet such that the two streets are perpendicular. Ultimately, the safest, ideal solution to improve the safety of this intersection is to realign it such that Terrace joins Highway 219 at a 90 degree angle. The challenge with this solution is that it would require Oregon Department of Transportation (ODOT) right of way acquisition from the adjacent property owner, and it would involve significant expense.

There are three vehicle movements of concern relating to this intersection. A vehicle driving south on Terrace Dr and turning right or left onto Highway 219, A vehicle driving South on Highway 219 and turning right onto Terrace Dr., and a vehicle driving north on Highway 219 and turning left onto Terrace Dr. If these different turning movements are considered separately, potential solutions are available which will help to improve the safety of the intersection until right of way is purchased and the intersection is realigned.

Vehicle driving south on Terrace Dr and turning right or left onto Highway 219

The primary concern with this movement is that while waiting at the stop sign, the driver has to turn their head farther than typical (and sometimes farther than possible depending on the driver) in order to see oncoming traffic coming southbound on Highway 219. One solution to this problem is to realign Terrace Drive so that it is perpendicular to Highway 219. Another solution is to close Terrace Drive, which would divert traffic to the neighboring local streets.

Vehicle driving north on Highway 219 and turning left onto Terrace Dr.

The driver in this situation does not have an issue with the angle of the intersection. According to the traffic study done by the Terra Estates development, there is sufficient intersection sight distance. A concern brought up by a resident is that a tree located in the planter strip alongside the East side of Highway 219 is impeding the vision of oncoming traffic. A shrub-like tree was removed several months ago which had resolved this issue. There is one additional tree that could be seen as an issue, however it is not considered an impedance to the sight vision.

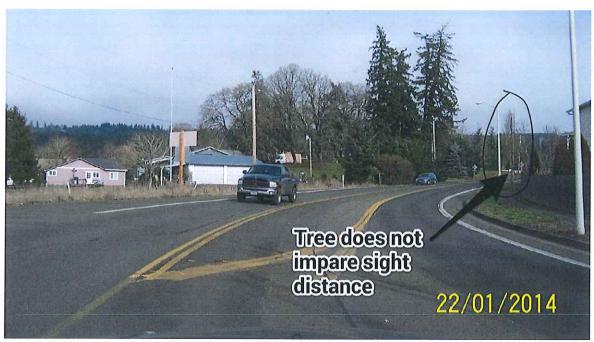


Image showing the remaining tree of interest

Vehicle driving south on Highway 219 and turning right onto Terrace Dr.

This turning movement does not have a sight vision concern. The safety concern with this turning movement is due to the fact that the driver must maneuver a more than 90 degree right turn. There is a culvert, which collects storm water along Highway 219 that is at this intersection. It is possible for a vehicle to enter into the ditch where this culvert is when turning. One solution for this problem is to extend the culvert along Highway 219 and backfill with gravel so there is no ditch if vehicles take the corner too tight. Another, less desirable solution would be to install striping, reflectors, or a guard rail to keep vehicles out of the ditch. A guard rail may not be permitted by ODOT in an urban setting.



Image showing proposed solution for the Terra Estates Development to complete

Recommendation

The engineering staff recommendation is that, per the conditions of approval for the Terra Estates subdivision, the developer work with the Engineering Department to extend the culvert at the intersection of Highway 219 and Terrace Drive. Additionally, if the Traffic Safety Commission directs, the City could begin looking into, and working with ODOT to acquire right of way for a future intersection improvement project. No action is recommended regarding the tree along Highway 219 that was requested to be removed.

Morris South of Natalie

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Classification	Grand	Totals
South	Bound	

						Hourly	Averages							
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axie	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Muiti	Multi
12:00 AM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 AM	2.3	0.0	1.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	2.3	0.0	1,3	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7;00 AM	5.0	0,0	2.7	2.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	3.7	0.0	0.7	2.0	0.0	0.7	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
9:00 AM	5.7	0.0	2.3	2.3	0,0	0.7	0.0	0,0	0.3	0.0	0,0	0.0	0.0	0.0
10:00 AM	4.7	0.0	2.7	1.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	3.3	0,0	0.7	1.0	0.0	1.3	0.3	0.0	0.0	0.0	0,0	0,0	0.0	0.0
12:00 PM	2.7	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	7.0	0.0	1.0	3.0	0.7	1,7	0.0	0.0	0.7	0.0	0.0	0,0	0.0	0.0
2:00 PM	4.7	0.0	2.0	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	6.0	0.0	3.0	2.0	0.0	1.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
4:00 PM	6.0	0.3	3.0	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	4.0	0.0	1.7	1.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
6:00 PM	5.3	0.0	3.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	1.7	0.0	0.7	1.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	1.7	0.0	1.3	0.0	0,0	0.3	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0.0
10:00 PM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0,0
ADT	68.7	0.3	31.0	24.7	0.7	10.3	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0

						Study Gr	and Total:	s						
			Cars &	2 Axle		2 Axle	3 Axle	4 Axie	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axie
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
South Bound	206	1	93	74	2	31	1	0	4	0	0	0	0	0
		0.5%	45.1%	35.9%	1.0%	15.0%	0.5%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%

Description 1: Description 2: Description 3:

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Classification Grand Totals North Bound

						Hourly	Averages							
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	8ike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
12:00 AM	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.3	0,0	0.3	0.0	0,0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0
4:00 AM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	2,0	0.0	0,3	1,3	0.0	0.3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	6.0	0.0	2.3	3.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
9:00 AM	2,0	0.0	1.0	0.7	0,0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	3.7	0.0	2.3	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	2,7	0,0	1,3	0.7	0.0	0.3	0.3	0.0	0,0	0,0	0.0	0.0	0.0	0.0
12:00 PM	4.0	0.0	2.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	5.0	0.0	1.7	2,7	0,0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	7.0	0.0	4.0	2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	5.0	0.0	2.3	1.7	0.0	0.7	0.3	0.0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 PM	5.7	0.0	3.3	0.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	5.3	0.0	3.0	1.7	0.0	0.7	0,0	0.0	0.0	0,0	0,0	0.0	0.0	0.0
6:00 PM	6.0	0.0	4.0	1.3	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
7:00 PM	5.3	0.0	3.7	1.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0,0	Ŏ.0	0,0
8:00 PM	4.0	0.0	2.7	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	4.7	0.0	2,7	2.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
ADT	73.0	0.0	41.0	21.7	0.0	9.0	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0

						Study G	and Total:	s						
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axte	5 Axle	>6 Axle	<6 Axle	6 Axie	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
North Bound	219	0	123	65	0	27	2	- 0	2	0	0	0	0	C
		0.0%	56.2%	29.7%	0.0%	12.3%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%

Description 1: Description 2: Description 3:

Classification Grand Totals Combined

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

							Averages							
	Total	Bike	Cars & Trailer	2 Axle	D	2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
12:00 AM	0.7	0.0	0.3	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
1:00 AM	0.3	0.0		0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.3		0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM		0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM		0.0	0,3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2.7	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.3	0.0	2.3	0,3	0.0	0.7	0,0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	2.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	7.0	0.0	3.0	3,7	0.0	0.3	0.0	0.0	0.0	0.0	n o	0.0	0.0	0.0
8:00 AM	9.7	0.0	3.0	5.0	0.0	1.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
9:00 AM	7.7	0.0	3,3	3.0	0.0	1.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
10:00 AM	8.3	0.0	5.0	2.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	6.0	0.0	2.0	1.7	0.0	1.7	0.7	0.0	0.0	0,0	0.0	0.0	ŏ.ŏ	0.0
12:00 PM	6.7	0.0	3.3	2.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	12.0	0.0	2.7	5.7	0.7	2.3	Ŏ.Ŏ	o.ŏ	0.7	0.0	0.0	0.ŏ	0.0	0.0
2:00 PM	11.7	0.0	6.0	3.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 PM	11.0	0.0	5.3	3.7	0.0	1.7	0.3	0.0	0.0	0.0	0.0			0.0
4:00 PM	11.7	0.3	6.3	2.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	Ŏ.Ŏ	0.0	0.0
5:00 PM	9.3	0.0	4.7	3.0	0.0	1.7	0.0	0.0	0.0			0.0	0.0	0.0
6:00 PM	11.3	0.0	7.7	3.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0,0	0.0
7:00 PM	7.0	0.0	4.3	2,0	ŏ.ŏ	0.7	0.0	0.0		0.0	0.0	0.0	0.0	0.0
8:00 PM	4.3	0.0	2.7	1.3	0.0	0.3			0,0	0.0	0.0	0.0	0.0	0.0
9:00 PM	6.3	0.0	4.0	2.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.3	0.0	1.3	0.0		0.3	0.0	0.0	0.0	0.0	0.0	0,0	0,0	0.0
11:00 PM	 0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	141.7			0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADI	141./	0.3	72.0	46.3	0.7	19.3	1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0

						Study G	and Total	S						
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axie	6 Axle	>6 Axle
C. () B 1	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
South Bound	206	1	93	74	2	31	1	0	4	0	Ó	0		0
March Barrel		0.5%	45.1%	35.9%	1.0%	15.0%	0.5%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
North Bound	219	0	123	65	Ð	27	2	0	2	0	0	O	0	0.070
Combined	425	0.0% 1 0.2%	56.2% 216 50.8%	29.7% 139 32.7%	0.0% 2 0.5%	12.3% 58 13.6%	0.9% 3 0.7%	0.0% 0 0.0%	0.9% 6 1.4%	0.0% 0 0.0%	0.0% 0 0.0%	0.0% 0 0.0%	0.0% 0 0.0%	0.0% 0 0.0%

Description 1: Description 2: Description 3:

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals South Bound

Hourly Averages														
mph		0 -	15 -	20 -	25 -	30 -	35 ~	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0,0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	2.3	0.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	2,3	1,0	0.7	0.7	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.3	0.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	5.0	1,0	1.3	1,7	1,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	3.7	2.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	5.7	2.0	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	4.7	1.3	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	3,3	1.7	0.7	1.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0,0	0.0	0.0
12:00 PM	2.7	1.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	7.0	3.0	3.0	1.0	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0.0	0.0	0.0
2:00 PM	4.7	1.0	1.7	1,3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	6.0	0.3	3.0	2,0	0.7	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 PM	6.0	0.7	4.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	4.0	0.3	2.7	1.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
6:00 PM	5.3	0.7	3.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	1.7	0,3	0.7	0.3	0,3	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
8:00 PM	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	1.7	0.3	1.0	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
10:00 PM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	68.7	17.3	32.7	15.0	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

50% 17.5 Percentile Speeds (mph) 10% 12.2 15% 13.3 85% 22,1 90% 23.1

10 mph Pace Speed Number in Pace 13.2 - 23.2 158 (76.7 %) Average Minimum Maximum 17.6 mph 7.0 mph 30.0 mph

65 mph 0.0 % 0 55 mph 0.0 % 0 75 mph 0.0 % 0 Speeds Exceeded Count

						Study Gr	and Totak	S						
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 ~	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
South Bound	206	52	98	45	10	1	0	0	0	0	0	0	0	0
		25.2%	47.6%	21.8%	4.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Description 1: Description 2: Description 3:

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed	Grand	Totals
No	th Bou	ınd

						Hourly A	Averages							
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	1,0	0,3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	2.0	0.7	0.7	0.3	0.0	0.0	0.3	0.0	0,0	0.0	0.0	0.0	0.0	o.ŏ
8:00 AM	6.0	1.0	3.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	2,0	1.0	1.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	3.7	2.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	2.7	0,3	1,7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	4.0	0.3	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	5.0	2.0	3.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	7.0	1.3	4.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	5.0	1.7	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	5.7	0.7	3.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	5,3	1.3	3.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
6:00 PM	6.0	2.0	3.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	5.3	2.0	2,7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	4.0	0.7	3.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	4.7	1.0	3.0	0.7	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o.o	ŏ.ŏ	ŏ.ŏ
ADT	73.0	20.0	42.3	9.7	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Percentile Speeds (mph)

10% 12.6 50% 16.7 85% 19.8 90% 20.6

10 mph Pace Speed Number in Pace

11.4 - 21.4 200 (91.3 %)

Average Minimum Maximum

17,1 mph 6.2 mph 84.5 mph

Speeds Exceeded

Count

55 mph 0.5 % 1

65 mph 0.5 % 1

75 mph 0.5 % 1

mph

Study Grand Totals 30 - 35 -< 35 < 40 0 1 20 -< 25 29 13.2% 25 -< 30 1 0.5% 45 -< 50 0 0.0% 55 -< 60 0 0.0% 60 -< 65 0 70 -< 200 65 -< 70 0 0.0% < 15 60 27.4% < 20 127 58.0% North Bound 1 0.5% 0.0% 0.0% 0.0% 0.5%

Morris South of Natalie

Speed Grand Totals Combined

Site: Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

						Hourly	Averages							
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 ~	70 -
MAY (199	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.3	0.3	0,0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3;00 AM	0.3	Ŏ,Q	6,3	ŏ'ŏ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Ď'Ŏ	0.0
4:00 AM 5:00 AM	2.7 3.3	0.7 1.3	2.0 1.3	0.0 0.7	0.0 0.0	0.0 0.0	0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	0.0	0.0
6:00 AM	2.7	1.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0 0.0
7:00 AM	7.0	1.7	2.0	2,0	ĭ.ŏ	ŏ,ŏ	Ŏ.3	0.0	0.0	0.0	0.0	0.0	ő.ő	0.0
8:00 AM	9.7	3.0	4.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	7.7	3.0	4.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	8.3	3.3	4.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
· 11:00 AM	6.0	2.0	2.3	1.7	0.0	0.0	0.0	Ö.Ö	0.0	0.0	Ŏ.Ö	Ŏ.ŏ	0.0	0.0
12:00 PM	6.7	1.3	4.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1,00 PM	12.0	5.0	6,0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Ŏ.Ŏ	0.0
2:00 PM	11.7	2.3	6.3	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	11.0	2.0	5.7	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	11.7	1.3	8.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	9.3	1.7	6.0	1,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.3
6:00 PM	11.3	2.7	6.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	7.0	2.3	3.3	1,0	0,3	0.0	0.0	0.0	0,0	0.0	0,0	0,0	0.0	0.0
8:00 PM	4.3	0.7	3.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	6.3	1.3	4.0	1.0	0,0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.3	0.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0
ADT	141,7	37.3	75.0	24.7	3.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Percentile Sp (mph)	eeds		10% 12.5				90% 21.9							
10 mph Pace Number in Pac			35	12.2 - 22 52 (82.8 %		Average Minimu Maximu	m	6.2	mph mph mph					
Speeds Exce	eded		55 mph 0.2 %	65 mp 0.2 %		mph 1.2 %								
Count			1		1	1								
						Study Gr	and Totals							
mph		0 -	15 -	20 -	25 -	30 ~	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
South Bound	206	52	98	45	10	1	G	D	0	0	0	0	0	0
		25.2%	47.6%	21.8%	4.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
North Bound	219	60	127	29	1	0	1	0	0	0	0	0	0	1
		27.4%	58.0%	13.2%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
Combined	425	112 25,4%	225 52,9%	74 17.4%	11 2.5%	0.2%	1 0.2%	0 0.0%	0 0.0%	0 0.0%	0.0%	0 0.0%	0 0.0%	0.2%
								/	/5	,0	0.010	0.070	0.010	0.270

Description 1: Description 2: Description 3:

Site:

Morris South of Natalie Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Volume Grand Totals

	Average Ho	urly Volumes	
	South Bound	North Bound	Combined
12:00 AM	0.3	0.3	0.7
1:00 AM	0.0	0.3	0.3
2:00 AM	0.3	0.0	0.3
3:00 AM	0.0	0.3	0.3
4:00 AM	2.3	0.3	2.7
5:00 AM	2,3	1,0	3,3
6:00 AM	1.3	1.3	2.7
7:00 AM	5.0	2.0	7.0
8:00 AM	3.7	6.0	9.7
9:00 AM	5.7	2.0	7.7
10:00 AM	4.7	3.7	8.3
11:00 AM	3,3	2.7	6.0
12:00 PM	2.7	4.0	6.7
1:00 PM	7.0	5,0	12.0
2:00 PM	4.7	7.0	11.7
3:00 PM	6.0	5.0	11,0
4:00 PM	6.0	5.7	11.7
5:00 PM	4.0	5.3	9,3
6:00 PM	5.3	6.0	11.3
7:00 PM	1.7	5.3	7.0
8:00 PM	0.3	4.0	4.3
9:00 PM	1.7	4.7	6.3
10:00 PM	0.3	1.0	1.3
11:00 PM	0.0	0.0	0.0
ADT	68.7	73.0	141.7

Study Grand Totals

Combined	North Bound	South Bound
425	219	206
	515%	48 5 %

Natalie East of Morris

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Volume Grand Totals

	Average Hou	ırly Volumes	
	East Bound	West Bound	Combined
12:00 AM	0.0	0.0	0.0
1:00 AM	0,0	0.0	0.0
2:00 AM	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0
5:00 AM	2.3	0.7	3.0
6:00 AM	3.7	1.0	4.7
7:00 AM	3,0	1,3	4,3
8:00 AM	6.7	2.7	9.3
9:00 AM	3.0	2.7	5.7
10:00 AM	1.0	3.0	4.0
11:00 AM	1.7	4,0	5.7
12:00 PM	3.3	1.7	5.0
1:00 PM	1.0	4.0	5,0
2:00 PM	4.3	3.0	7.3
3:00 PM	6.3	5.7	12,0
4:00 PM	5.0	6.3	11.3
5:00 PM	4.0	3.0	7.0
6:00 PM	3.3	3.0	6.3
7:00 PM	1.0	2,7	3.7
8:00 PM	2.0	1.0	3.0
9:00 PM	1,3	3.0	4.3
10:00 PM	0.7	0.7	1.3
11:00 PM	0.0	0.3	0.3
ADT	53.7	49.7	103.3

Study Grand Totals

ocaa, o.c	11.0 102010	
East Bound	West Bound	Combined
 161	149	310
51.9 %	48.1 %	

Natalie East of Morris

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals East Bound

						Hourly Averages mph 0- 15- 20- 25- 30- 35- 40- 45- 50- 55- 50- 55- 70-														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -						
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200						
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
1:00 AM	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0						
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
3:00 AM	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
5:00 AM	2,3	1.0	0,0	1.3	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0						
6:00 AM	3.7	1.0	1.7	1,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
7:00 AM	3.0	0.7	1.0	1,0	0,3	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0						
8:00 AM	6.7	1.3	2.0	2.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
9:00 AM	3.0	0.7	1.7	0.7	0.0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0						
10:00 AM	1.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
11:00 AM	1.7	0.0	1.0	0.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
12:00 PM	3.3	1.3	1.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
1:00 PM	1,0	0.7	0.0	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0						
2:00 PM	4,3	1.3	1.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
3:00 PM	6.3	0,3	2,3	2.0	1.7	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0						
4:00 PM	5.0	0.7	2.3	1,3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
5:00 PM	4.0	1.3	1.7	0.3	0.7	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
6:00 PM	3.3	0.3	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0						
7;00 PM	1,0	0.0	0.7	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0	0,0						
8:00 PM	2.0	1.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
9:00 PM	1,3	0.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0						
10:00 PM	0.7	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
11:00 PM	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0						
ADT	53.7	12.0	21.7	14.0	4.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0						

 Percentile Speeds
 10%
 15%
 50%
 85%
 90%

 (mph)
 12.0
 13.4
 18.1
 23.4
 25.3

 10 mph Pace Speed
 14.4 - 24.4
 Average
 18.9 mph

 Number in Pace
 114 (70.8 %)
 Minimum Maximum
 5.6 mph Maximum

Natalie East of Morris

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals West Bound

Hourly Averages														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1;00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5;00 AM	0.7	0.3	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	1.3	0.0	1,0	0,3	0.0	0.0	0.0	0,0	0,0	0,0	0.0	0,0	0.0	0.0
8:00 AM	2.7	1.0	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	2,7	1.7	0.3	0.3	0.3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	3.0	0.7	1.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	4.0	1.0	1,7	1.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
12:00 PM	1.7	0.0	1.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	4.0	1,0	1.3	0,7	1.0	0.0	0,0	0.0	0.0	0.0	0,0	0,0	0.0	0.0
2:00 PM	3.0	0.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
3:00 PM	5.7	1.0	1.7	2.0	0.7	0.3	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	6.3	1.0	2.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5;00 PM	3.0	0,0	1.7	1,3	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	3.0	0.7	1.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	2,7	1.0	0.3	1,0	0,3	0.0	0,0	0.0	0.0	0.0	0,0	0,0	0.0	0.0
8:00 PM	1.0	0.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	3.0	0.7	0.7	1.0	0.3	0.3	0.0	0.0	0,0	0,0	0,0	0.0	0.0	0.0
10:00 PM	0.7	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0,3	0.0	0.0	0,3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	49.7	10.7	18.7	15.0	4.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph)

10% 10.4 15% 13.4 50% 18.9 85% 23.2 90% 25.1

10 mph Pace Speed Number in Pace

13.1 - 23.1 105 (70.5 %)

Average Minimum Maximum

18.5 mph 6.4 mph 33.6 mph

Speeds Exceeded

Count

mph West Bound 55 mph 0.0 % 0 65 mph 0.0 % 0 75 mph 0.0 % 0

Study Grand Totals 30 - 35 -< 35 < 40 40 -< 45 0 0.0% 70 -< 200 0 0.0% 0.0% 0.0% 0.0% 0.0%

Description 1:

Natalie East of Morris

Description 2: Description 3:

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals Combined

						Hourly A	Averages							
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 ~	70 -
• • •	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0,0	0.0	0,0	0.0	0,0	0,0	0.0	0.0	0.0	0,0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.0	1.3	0.3	1.3	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0
6:00 AM	4.7	1.0	2.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	4.3	0.7	2.0	1.3	0.3	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0,0	0.0
8:00 AM	9.3	2.3	2.7	3.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	5.7	2.3	2.0	1.0	0.3	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0,0
10:00 AM	4.0	1.0	2.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	5.7	1.0	2.7	1.7	0.3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	5.0	1.3	2.7	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	5.0	1.7	1,3	1.0	1.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
2:00 PM	7.3	2.0	3.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	12.0	1.3	4,0	4.0	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	11.3	1.7	4.7	4.3	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	7.0	1.3	3.3	1.7	0.7	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0,0
6:00 PM	6.3	1.0	3.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
7:00 PM	3.7	1.0	1.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	3.0	1.0	0.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	4.3	0.7	1,3	1.7	0.3	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.3	0.0	0.3	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.3	o.o	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	103.3	22.7	40.3	29.0	9.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0

Percentile Speeds (mph)

50% 18.4 90% 25.4 10% 11.6 85% 23,4

10 mph Pace Speed Number in Pace

14.4 - 24.4 219 (70.6 %)

Speeds Exceeded

Average Minimum Maximum 18.7 mph 5.6 mph 67.3 mph

65 mph 0.3 % 1 75 mph 0.0 % 0 55 mph 0.3 % 1

Count

Study Grand Totals 30 - 35 -< 35 < 40 70 -< 200 0 0.0% 0 0.0% 0 0.0% 15 -< 20 65 40.4% 56 37.6% 121 39.0% 60 -< 65 0 50 -< 55 55 -< 60 40 mph 20 20 -< 25 42 26.1% 45 30.2% 87 28.1% < 30 14 8.7% 14 9.4% 28 9.0% < 45 0.0% East Bound 22.4% 32 21.5% 68 21.9% 0.6% 0.0% 0.0% 0.0% 0 0.0% 0.0% 1.2% 0.0% West Bound 149 1.3% 4 1.3% 0.0% 0 0.0% 0.0% 0 0.0% 0.0% 0 0.0% 0.0% 0 0.0% 0.0% 1 0.3% 310 0.3% Combined

Natalie East of Morris

Description 1: Description 2: Description 3:

Classification Grand Totals East Bound

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

						Hourly	Averages							
	_		Cars &	2 Axle		2 Axie	3 Axle	4 Axte	<5 Axfe	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multí	Multi
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0,0	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	2.3	0.0	1.3	1.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	3,7	0.0	2.3	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	3,0	0.0	1.3	1.7	0.0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0
8:00 AM	6.7	0.0	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	3.0	0.0	2,3	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	6.0	0.0	0,0
10:00 AM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	1.7	0.0	1.0	0.3	0.0	0.3	0.0	0.0	0,0	0.0	0.0	0,0	0.0	-0.0
12:00 PM	3,3	0.0	2.0	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1;00 PM	1.0	0,0	1.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	4.3	0.0	2.3	1.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	6,3	0.0	4.7	1.0	0,0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
4:00 PM	5.0	0.0	2.3	1.7	0.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	4.0	0,0	3.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
6:00 PM	3.3	0.0	1.7	1.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
7:00 PM	1,0	0,0	0.7	0,3	0.0	0.0	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0.0
8:00 PM	2.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	1,3	0.0	1.0	0.3	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	7.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
ADT	53.7	0.0	33.0	15.7	0.0	3.0	1.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0

						Study Gr	and Total	s						
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
East Bound	161	0	99	47	0	9	4	0	2	0	0	0	0	ő
		0.0%	61.5%	29.2%	0.0%	5.6%	2.5%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%

Natalie East of Morris

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Classification Grand Totals West Bound

						Hourly	Averages			
	Total	Bike	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Do
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1:00 AM	0.0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 AM	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5:00 AM	0.7	0.0	0.3	0.0	0.0	0,3	0.0	0,0	0,0	
6:00 AM	1.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.0	
7.00 844	ର ଜଣ ହେଉଁ ବିଲ୍ଲାନ୍ତ ହେଉଁ	ം നിന്	10	നാ	ስ ሰ	กก	ሳሰል	0.0	0.0	

	Hourly Averages													
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>б Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0,0	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	0,7	0,0	0.3	0,0	0,0	0,3	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0.0
6:00 AM	1.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	1,3	0,0	1.0	0.3	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0
8:00 AM	2.7	0.0	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	2,7	0.0	1.0	1.0	0.0	0.3	0.0	0,0	0.3	0.0	0.0	0.0	0.0	0.0
10:00 AM	3.0	0.0	1.3	1.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	4,0	0.3	2,7	0.7	0.0	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
12:00 PM	1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	4,0	0.3	2.0	1.3	0.0	0.3	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
2:00 PM	3.0	0.0	1.3	0.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	5.7	0.0	2.7	2,0	0.0	1.0	0,0	0,0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 PM	6.3	0.3	4.0	1.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	3.0	0,0	2.0	0.7	0.0	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	3.0	0.0	1.3	1.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	2.7	0.0	1.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	3.0	0.0	2,7	0.3	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	Ŏ.Ŏ	0.0
10:00 PM	0.7	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.3	0,0	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	49.7	1.0	29.0	13.3	0.3	5.7	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

						Study Gr	and Total:	5						
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
West Bound	149	3	87	40	1	17	0	0	1	0	0	0	0	0
nest booms		2.0%	58.4%	26.8%	0.7%	11.4%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%

Description 1: Natalle East of Morris Description 2: Description 3:

Classification Grand Totals Combined

Site: Natalie East of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

							1011100							
			• •	D. A. de		Hourly 2 Axle	Averages 3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Tetal	Bike	Cars & Trailer	2 Axle Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
40.00 444	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 AM	0.0		0.0	0.0	ŏ.ŏ	0.0	0.0	0.0	Ŏ.ŏ	ŏ.ŏ	Ŏ,Ğ	0.0	0.0	0.0
1:00 AM	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0,0	0.0	0.0	0.0	0.0 0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.0	0,0	1.7	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	4.7	0.0	2.3	1,3	0.0	1.0	0.0		0.0	0.0	0.0	Ŏ.Ŏ	0.0	0.0
7:00 AM	4,3	0.0	2.3	2,0	0.0	0,0	0,0	0,0		0.0	0.0	0.0	0.0	0.0
8:00 AM	9.3	0.0	4.7	4.7	0,0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
9:00 AM	5.7	0,0	3,3	1.3	0.0	0.3	0,0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
10:00 AM	4.0	0.0	2.3	1.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0			0.0
11:00 AM	5.7	0.3	3.7	1.0	0.0	0,7	0.0	0,0	0,0	0.0	0.0	0.0	0.0	
12:00 PM	5.0	0.0	3.7	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	5,0	0.3	3,0	1.3	0.0	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	7.3	0.0	3.7	2.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	12.0	0.0	7.3	3.0	0.0	1.7	0.0	0.0	0.0	0,0	0,0	0.0	0,0	0.0
4:00 PM	11.3	0.3	6.3	2.7	0.3	1,0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	7.0	0.0	5.3	0.7	0.0	1.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0
6:00 PM	6.3	0.0	3.0	2.7	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
7:00 PM	3.7	0.0	2.3	1.3	0.0	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0.0	0.0
8:00 PM	3.0	0.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	4.3	0.0	3.7	0.7	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0
10:00 PM	1.3	0.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
ADT	103.3	1.0	62.0	29.0	0.3	8.7	1.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0

						Study Gr	and Total:	s						
			Cars &	2 Axle		2 Axle	3 Axie	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axie	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
East Bound	161	0	99	47	0	9	4	0	2	0	0	0	0	0
Edot E ville		0.0%	61.5%	29.2%	0.0%	5.6%	2.5%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
West Bound	149	3	87	40	1	17	0	0	1	0	0	0	0	0
Trust Board		2.0%	58.4%	26.8%	0.7%	11.4%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined	310	3	186	87	1	26	4	0	3	0	0	0	0	0
		1.0%	60.0%	28.1%	0.3%	8.4%	1.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Description 1:

Description 2: Description 3:

Natalie West of Morris

Natalie West of Morris Site: Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Volume Grand Totals

Average Hourly Volumes												
	East Bound	West Bound	Combined									
12:00 AM	0.0	0.0	0.0									
1:00 AM	0.0	0.0	0.0									
2:00 AM	0.3	0.0	0.3									
3:00 AM	0.0	0.0	0.0									
4:00 AM	1.0	1.0	2.0									
5:00 AM	2.7	0.7	3,3									
6:00 AM	1.7	2.0	3.7									
7:00 AM	2.3	2.3	4,7									
8:00 AM	2.7	3.3	6.0									
9:00 AM	3,3	2.3	5.7									
10:00 AM	2.7	4.0	6.7									
11:00 AM	1.7	2.7	4,3									
12:00 PM	2.7	2.3	5.0									
1:00 PM	2.7	3.7	6.3									
2:00 PM	0.7	0.3	1.0									
3:00 PM	3.0	2.3	5,3									
4:00 PM	2.3	1.7	4.0									
5:00 PM	3.0	2,3	5,3									
6:00 PM	1.7	3.3	5.0									
7:00 PM	0.3	3.0	3,3									
8:00 PM	1.0	1.0	2.0									
9:00 PM	1,0	1,0	2.0									
10:00 PM	0.0	1.0	1.0									
11:00 PM	0.0	0.0	0.0									
ADT	36.7	40.3	77.0									

Study Grand Totals East Bound West Bound Combined 121 231 110 47.6 % 52.4 %

Natalie West of Morris

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals East Bound

Hourly Averages														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0,0	0.0	0.0
4:00 AM	1.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	2.7	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
6:00 AM	1.7	0.3	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	2.3	0.3	0.3	1.3	0.3	0,0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0
8:00 AM	2.7	1.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	3.3	0.0	2.3	1.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	2.7	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	1.7	0.0	1.0	0.7	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	2.7	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	2.7	1.3	1,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	0.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	3.0	0.0	2.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
4:00 PM	2.3	0.7	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	3.0	1.0	1.0	0.3	0.7	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	1.7	0.7	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	0.3	0,0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	1.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
9:00 PM	1,0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
10:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
ADT	36.7	13.3	15.3	6.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph) 10% 10.7 15% 11.2 50% 16.5 85% 21.1 90% 22.2

16.5 mph 7.0 mph 26.9 mph 10 mph Pace Speed Number in Pace 10.7 - 20.7 81 (73.6 %) Average Minimum Maximum Speeds Exceeded

55 mph 0.0 % 65 mph 0.0 % 75 mph 0.0 % Count

						Study Gr	and Total:	S						
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
111,577	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
East Bound	110	40	46	19	5	0	0	0	0	0	0	0	C	0
		36.4%	41.8%	17.3%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Natalie West of Morris

Speed Grand Totals

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed	Gr	and	10	otals
We	st	Bou	nd	l

Hourly Averages														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0,0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	1.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	0.7	0.3	0.3	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
6:00 AM	2.0	0.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	2.3	0,7	1.0	0,3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	3.3	0.7	1.7	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	2.3	1.0	1,0	0.3	0.0	0,0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0
10:00 AM	4.0	2.3	0.7	1,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	2.7	1,0	0.7	0.7	0.3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0,0	0.0
12:00 PM	2.3	1.3	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	3.7	0.7	1.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	2.3	0.3	0.7	1.0	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	1.7	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	2.3	0.3	0.7	1.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	3.3	0.3	2.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	3.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	1.0	0.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	1,0	0.0	0.7	0,0	0,3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	40.3	10.7	17.0	10.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph) 15% 12.8 50% 17.6 85% 23.5 90% 24.4 10 mph Pace Speed Number in Pace 12.6 - 22.6 87 (71.9 %) Average Minimum Maximum

Speeds Exceeded

65 mph 0.0 % 55 mph 0.0 % 75 mph 0.0 % Count

						Study Gr	and Totals	5						
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
West Bound	121	32	51	30	8	0	0	0	0	0	0	0	0	0
		26.4%	42.1%	24.8%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

17.8 mph 5.7 mph 29.9 mph

Natalie West of Morris

Speed Grand Totals

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Speed Grand Totals Combined														
Hourly Averages														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 ~	55 -	60 -	65 -	70 -
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	2.0	0.3	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5;00 AM	3.3	2.3	1.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0
6:00 AM	3.7	1.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	4.7	1,0	1,3	1.7	0.7	0,0	0.0	0,0	0,0	0.0	0.0	0.0	0.0	0.0
8:00 AM	6.0	2.0	2.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	5.7	1,0	3.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
10:00 AM	6.7	4.7	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	4,3	1.0	1,7	1.3	0.3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	5.0	3.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	6.3	2.0	2.7	1,3	0,3	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0
2:00 PM	1.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	5.3	0.3	2.7	4.3	1.0	0.0	0.0	0.0	0.0	0.0	ō,ō	0.0	0.0	0.0
4:00 PM	4.0	0.7	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	5.3	1.3	1.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0
6:00 PM	5.0	1.0	2.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	3,3	1,0	1,3	1,0	0.0	0.0	0.0	0,0	0.0	0.0	0,0	0,0	0.0	0.0
8:00 PM	2.0	0.7	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	2.0	0.3	1.3	0.0	0.3	ŏ.ŏ	ŏ'ŏ	0.0	ŏ.ŏ	ŏ'Ŏ	0.0	, 0,0	ŏ.ŏ	0.0
10:00 PM	1.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11;00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
ADT	77.0	24.0	32.3	16.3	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph)

10% 11.0 15% 12.0 50% 17.0 85% 22.4 90% 23.6

10 mph Pace Speed Number in Pace

11.2 - 21.2 162 (70.1 %)

17.2 mph 5.7 mph 29.9 mph

Speeds Exceeded

Average Minimum Maximum

Count

65 mph 0.0 % 0 55 mph 0.0 % 0

75 mph 0.0 % 0

	Study Grand Totals														
mph		0 -	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	
	Total	< 15	< 20	< 25	< 30	< 35	< 40	< 45	< 50	< 55	< 60	< 65	< 70	< 200	
East Bound	110	40	46	19	5	C	0	0	0	0	٥	0	0	0	
		36.4%	41.8%	17.3%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
West Bound	121	32	51	30	8	0	0	0	0	0	Ð	0	0	0	
		26.4%	42.1%	24.8%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Combined	231	72	97	49	13	0	0	0	0	0	0	0	0	0	
		31.2%	42.0%	21.2%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Description 1: Description 2:

Natalie West of Morris

12:00 AM 1:00 AM 2:00 AM 3:00 AM 4:00 AM 5:00 AM 8:00 AM 9:00 AM 10:00 AM 10:00 AM 10:00 AM 10:00 PM 2:00 PM 2:00 PM 3:00 PM

Description 3:

Cars & Trailer 0.0

2 Axle

Classification Grand Totals East Bound

	Hourly	Averages							
	2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axie	<6 Axle	6 Axle	>6 Axle
Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0,0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0,0	0.0	0.0	0.0	0,0	0,0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0,3	0.0	0.0	0.3	0.0	0.0	0.0	0,0	0,0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0 0.3	1,3	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.7	0.0	0.0	0.3	0.0	0.0	0,0	0.0	0.0
0.0	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.3	0.3 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0,0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0,0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	Ŏ'Ď	0.0	0,0	0.0	0,0	0.0
0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.3	3.7	0.0 0.3	0.0	0.0	0.0	0.0	0,0	0.0	0.0
V.3	2.7	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0

East Bound	Total 110	Bike 0	Cars & Trailer 79	2 Axle Long 16	Buses 1	Study Gr 2 Axie 6 Tire 11	and Total 3 Axle Single 1	4 Axie Single	<5 Axle Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axie Multi
East Bound	110	0.0%	79 71.8%	16 14.5%	0.9%	11 10.0%	0.9%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Natalie West of Morris

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

Classification Grand Totals West Bound

Hourly Averages														
	T-4-1	D.U.	Cars &	2 Axle	_	2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
12.00 414	Total 0.0	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
12:00 AM 1:00 AM		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
2:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0,0	0.0	0.0	0.0
4:00 AM	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5;00 AM	0.7	0,0	0,7	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0	0.0
6:00 AM	2.0	0.0	1.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	2,3	0,0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0,0
8:00 AM	3.3	0.0	1.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	2.3	0.0	1.0	0,7	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
10:00 AM	4.0	0.0	1.7	2.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	2,7	0.0	2,3	0.3	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
12:00 PM	2.3	0.0	0.7	0.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	3.7	0.0	2.0	1.0	0,3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	2.3	0.0	0.3	1.7	0.0	0.3	0,0	0.0	0.0	0,0	0,0	0.0	0.0	0.0
4:00 PM	1.7	0.0	1.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	2.3	0.0	1.7	0.3	0,0	0.3	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	3.3	0.0	2.0	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	3.0	0.0	2.0	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	1.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0.0	0.0
10:00 PM	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	40.3	0.0	22.0	11.3	0.3	6.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

Study Grand Totals														
			Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axle	<6 Axle	6 Axle	>6 Axle
	Total	Bike	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi
West Bound	121	0	66	34	1	19	0	0	1	0	0	0	0	0
		B 0%	54 5%	28 104	0.8%	15 7%	0.00%	O O O O	0.00/-	0.006	0.000	0.007	0.00/	0.007

Natalie West of Morris

Description 1: Description 2: Description 3:

Classification Grand Totals Combined

Site: Natalie West of Morris Tuesday, 01/14/2014, 12:00:00 AM -Thursday, 01/16/2014, 11:59:59 PM

						Marretra	Averages							
	Total	Bike	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle	4 Axle	<5 Axle	5 Axle	>6 Axie	<6 Axle	6 Axle	>6 Axle
12:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	Single 0.0	Single 0.0	Double	Double	Double	Multi	Multi	Multi
1;00 AM	0.0	0.0	ŏ.ŏ	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0,0	0.0	0.0
2:00 AM	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	Ŏ.a	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	2.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5;00 AM	3.3	0.0	$\hat{2}.\check{3}$	0.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	3.7	0.0	2.7	0.3	0.0	0.7	0.0	0.0	0.0	0.0	0,0	0,0	0.0	0.0
7:00 AM	4.7	0.0	4.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	6.0	0.0	2.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	5.7	Ŏ.ŏ	3.3	1.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	6.7	0.0	3.7	2.3	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0,0	0.0	0.0
11:00 AM	4.3	0.0	2.7	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	5.0	0.0	2.3	1.3	0.3	1.0		0,0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	6.3	0.0	3.3	1.3	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	1.0	0.0	0.3	0.3	0.0	0.3	0,0	0.0	0.3	0.0	0.0	0.0	0.0	0,0
3:00 PM	5.3	0.0	3.0	2.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	4.0	0.0	2.7	0.0	0.0	0.3 1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	5.3	0.0	4.0	0.7	0.0		0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	5.0	0.0	3.7	1.0	0.0	0.7 0.3	Ö'Ö	0.0	0,0	0.0	0.0	0.0	0.0	0.0
7:00 PM	3.3	0.0	2.3	0.3			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	2.0	0.0	2.0	0.0	0.0 0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	2.0	0.0	1.0	1.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	1.0	0.0	1,0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0,0	0.0	0.0
11:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	77.0	0.0	48.3		0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
ADI	77.0	0.0	40.3	16.7	0.7	10.0	0.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0

						Study Gr	and Total	s						
	Total	Bike	Cars & Trailer	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axie Double	5 Axle Double	>6 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi
East Bound	110	0	79	16	1	11	1	0	2	. 0	n n	0		7.0.0
		0.0%	71.8%	14.5%	0.9%	10.0%	0.9%	0.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
West Bound	121	0	66	34	1	19	0	0	1	0	0.0.0	0.070	0.070	0.070
		0.0%	54.5%	28.1%	0.8%	15.7%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined	231	0	145	50	2	30	1	0	3	ก	0	0.070	0.070	0.070
		0.0%	62.8%	21.6%	0.9%	13.0%	0.4%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	n n%